

Utility and Value of Flexible Epidemiologists for Enhancing Health Department Infectious Disease Epidemiology and Laboratory Capacity

OSTLTS Generic Information Collection Request

OMB No. 0920-0879

Supporting Statement – Section A

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Section A – Justification

1. Circumstances Making the Collection of Information Necessary

Background

This data collection is being conducted using the Generic Information Collection mechanism of the OSTLTS Survey Center (OSC) – OMB No. 0920-0879. The respondent universe for this data collection aligns with that of the OSC. Data will be collected from Epidemiologists and Principal Investigators acting in their official capacities at state, local, and territorial health departments. This data collection is authorized by Section 301 of the Public Health Service Act (42 U.S.C. 241).

Since 2010, the Centers for Disease Control and Prevention (CDC)'s Epidemiology and Laboratory Capacity for Infectious Diseases Cooperative Agreement (ELC) has helped states strengthen core epidemiology and laboratory capacity needed to track and respond quickly to a variety of infectious diseases. This cooperative agreement currently provides funding to all 50 state health departments, six local health departments (Los Angeles County, Philadelphia, New York City, Chicago, Houston and the District of Columbia), and eight territories or U.S. affiliates.

ELC aims to protect the public health and safety of the American people by enhancing the capacity of health departments to effectively detect, respond, prevent and control known and emerging (or re-emerging) infectious diseases (**see Attachment A – ELC Logic Model**). This goal is accomplished by providing targeted resources and support so health departments can:

- 1) Strengthen epidemiological capacity;
- 2) Enhance laboratory capacity;
- 3) Improve health information systems;
- 4) And enhance collaboration among epidemiology, laboratory, and health information systems components of public health departments and their partners (e.g., commercial labs, hospitals) within and across public health jurisdictions.

The focus of ELC activities is primarily on naturally occurring infectious diseases, drug-resistant infections, and health information systems capacity. There are two primary classes of ELC activities: (1) categorical (disease-specific) activities where various CDC programs provide funding and technical resources for specific activities; and (2) flexible activities where grantees use funds to address remaining high-priority needs and respond to unexpected infectious disease issues.

Funding for flexible activities has been critical in addressing high-priority areas and unexpected infectious disease issues. In the past few years, health departments have faced a number of organizational and fiscal challenges around hiring and maintaining personnel. New standards have been developed to improve aspects of public health which require more resources to implement. Yet, according to 2009 findings from a National Assessment of Epidemiology Capacity conducted by the Council of State and Territorial Epidemiologists, the overall ability to address the Essential Services of Public Health has declined; from 2006 to 2009, the total number of epidemiologists per 100,000 population has decreased 12 percent (from 0.82 to 0.70 per 100,000). Thus, of particular

importance here are ELC's Flexible Epidemiologist positions that state, local and territorial health departments utilize for infectious disease projects or emergencies that are not strictly tied to a disease-specific funding stream. For example, during the Multistate Fungal Meningitis Outbreak Investigation in 2012, ELC resources supported a Flexible Epidemiologist who was utilized for Kentucky's outbreak response. Rhode Island also stated: "Fungal meningitis [was] not a core assignment for any of our epidemiologists so having flexible deployable epidemiologists as funded by [the Affordable Care Act] was very useful in our small office." When North Dakota lost funding for a Foodborne Epidemiologist, the ELC Flexible Epidemiologist absorbed some of the responsibilities of that role so that Foodborne Disease Outbreak surveillance could continue. This strategy supports the overall goal of ELC by enhancing the capacity of state and local health departments to effectively prevent and control known and emerging (or re-emerging infectious diseases).

Epidemiologist positions that are not limited to working on one specific disease highlight ELC's commitment to providing flexible support for infectious disease activities awardees deem highest priorities. Since 2010, ELC has provided funding for approximately 50 part- and full-time Flexible Epidemiologists (also known as "non-categorical" and "multi-disease epidemiologists") in 40 state and local health departments. These positions have been critical in sustaining the epidemiology capacity of health departments.

To this end, this assessment will collect in-depth, qualitative data to determine the overall value of these positions to health departments and identify areas for improvement. This will be accomplished by:

- 1) Assessing the utilization of these positions to better understand what ELC flexible epidemiologists are doing – What defines a flexible epidemiologist?
- 2) Assessing the perceived value and need of these positions to describe how they contribute to strengthening epidemiology capacity – How do flexible epidemiologists enhance epidemiology capacity so that health departments can effectively detect, respond, prevent and control infectious diseases?
- 3) Capturing recommendations on how this program can be improved to better meet the needs of its participants and stakeholders – What changes should be made to help facilitate or optimize the ability of flexible epidemiologists to serve state and local health departments?

These types of questions, which include inquiries for rich and detailed information, warrant a need for qualitative data. It will allow ELC to yield richer and insightful data about how these positions have contributed to enhanced epidemiology capacity in state and local health departments, and allow the interviewer the opportunity to clarify questions and explore specific topics of interest in-depth.

Privacy Impact Assessment

Overview of the Data Collection System – The data collection system consists of an in-depth interview guide (**see Attachment B – Interview Guide Version for Principal Investigators and Attachment C– Interview Guide Version for Epidemiologist**) designed to assess 20 Flexible Epidemiologists and Principal Investigators regarding the overall value of these positions to health departments, how they are utilized to enhance epidemiology capacity, and identify areas for improvement.

The data collection instrument will be administered as a telephone interview. The interview protocol and interview guide(s) were pilot tested by two public health professionals. They were piloted at two sites (i.e., four individuals) for construct validity to ensure that the line of inquiry is consistent with the assessment questions, and establish the estimated time required to complete the interview (39 minutes).

Items of Information to be Collected – There are two versions of the data collection tool. The interview guide for Flexible Epidemiologists consists of 11 open-ended questions, plus probes and follow-up questions. The interview guide for Principal Investigators consists of 14 open-ended questions, plus probes and follow-up questions. These questions are divided into four major sections:

- 1) Role of the Flexible Epidemiologist – respondents are asked about how they define the role of a flexible epidemiologist, and how they are utilized in their agency.
- 2) Activities of the Flexible Epidemiologist – respondents are asked to describe the activities and projects flexible epidemiologists work, and to describe their involvement in collaborations and outbreak investigations.
- 3) Impact of Flexible Epidemiology Activities – respondents are asked to describe the impact of having a flexible epidemiologist on their team, and to specify how they've been able to achieve specific ELC outcomes through their support.
- 4) Opportunities for Improvement – respondents are asked to discuss how ELC could help optimize and facilitate the ability of flexible epidemiologists to better serve health departments, and other strategies ELC could do to further support epidemiology capacity for infectious diseases at the state and local level.

Identification of Website(s) and Website Content Directed at Children Under 13 Years of Age –No website content will be directed at children.

2. Purpose and Use of the Information Collection

This assessment will show whether the Flexible Epidemiologist positions are being implemented as planned, provide feedback about the program, and allow program planners to determine whether investments made toward flexible activities and personnel is producing its desired outputs and outcomes that contribute to strengthened epidemiology capacity. In-depth interviews will allow ELC to yield richer and insightful data about how these positions have contributed to enhanced epidemiology capacity in state and local health departments, and allow the interviewer the opportunity to clarify questions and explore specific topics of interest in-depth.

Conclusions drawn from this assessment will be used: 1) to modify the theoretical framework (i.e., ELC logic model), 2) to assess the degree to which funding for flexible epidemiology program enhances epidemiology capacity in health departments, and 3) make recommendations for shaping this program and other future program strategies. Results will be shared with internal and external stakeholders to demonstrate the value of the flexible epidemiology program and identify opportunities to strengthen the program. Without the opportunity to collect information about this program strategy, it would be difficult to judge the value of these positions to state and local health departments, and make future decisions about whether or not this strategy enables ELC to make progress toward its intended outcomes and impact.

Privacy Impact Assessment

To protect the privacy of respondents, no individually identifiable information is being collected. Interviews will be recorded so that responses are accurately captured for transcription. Once the audio recording has been transcribed, the audio recording will be erased. The written transcript of the audio recording will not include any individual, agency, or jurisdiction identifiers. A summary report of the findings will be prepared and data will be aggregated so there are no individual level identifiers.

3. Use of Improved Information Technology and Burden Reduction

In-depth interviews will allow ELC to yield richer and more insightful data about how these positions have contributed to enhanced epidemiology capacity in state and local health departments, and allow the interviewer the opportunity to clarify questions and explore specific topics of interest in-depth. These interviews will last an average of 39 minutes per telephone interview. This eliminates the travel burden for both the interviewer and respondent. The in-depth interviews were designed to collect the minimum information necessary for the purposes of this project (i.e., limited to 15 questions).

4. Efforts to Identify Duplication and Use of Similar Information

ELC is the only program that provides funding for Flexible Epidemiologist positions. No systematic data collection in the past has been implemented to collect information about ELC Flexible Epidemiologists. Information obtained will be used in multiple ways to help ELC better support and sustain infectious disease capacity at the state and local level. This includes the ability to collect more standardized information in the future through performance measures and progress reports. This information is specific to the ELC Cooperative Agreement and there is no information available that can substitute for this data collection through other mechanisms.

5. Impact on Small Businesses or Other Small Entities

No small businesses will be involved in this data collection.

6. Consequences of Collecting the Information Less Frequently

This request is for a one time data collection. There are no legal obstacles to reduce the burden. The purpose of this request is to ensure collection of data that is not otherwise available in current, time sensitive or relevant formats to specific or emergent priorities of HHS and CDC. Specifically, without this data there would be:

- Less effective and less informed decision making driving ELC programmatic strategies and funding decisions;
- Inability to assess the usefulness of a critical ELC program strategy and its impact on key program outcomes;
- No timely feedback regarding information used that can be used to make program improvements to better serve state and local health departments.

7. Special Circumstances Relating to the Guidelines of 5 CFR 1320.5

There are no special circumstances with this information collection package. This request fully complies with the regulation 5 CFR 1320.5 and will be voluntary.

8. Comments in Response to the Federal Register Notice and Efforts to Consult Outside the Agency

This data collection is being conducted using the Generic Information Collection mechanism of the OSTLTS Survey Center (OSC) – OMB No. 0920-0879. A 60-day Federal Register Notice was published in the Federal Register on October 22, 2010, Vol. 75, No. 204; pp. 65353-54. Two comments were received from the Association of State and Territorial Health Officials (ASTHO), and the National Association of County and City Health Officials (NACCHO).

CDC partners with professional STLT organizations, such as the Association of State and Territorial Health Officials (ASTHO), the National Association of County and City Health Officials (NACCHO), and the National Association of Local Boards of Health (NALBOH) along with the National Center for Health Statistics (NCHS) to ensure that the collection requests under individual ICs are not in conflict with collections they have or will have in the field within the same timeframe.

9. Explanation of Any Payment or Gift to Respondents

CDC will not provide payments or gifts to respondents.

10. Assurance of Confidentiality Provided to Respondents

The Privacy Act does not apply to this data collection. Employees of state and local public health agencies will be speaking from their official roles and will not be asked, nor will they provide individually identifiable information. This data collection is not research involving human subjects.

11. Justification for Sensitive Questions

No information will be collected that are of personal or sensitive nature.

12. Estimates of Annualized Burden Hours and Costs

The estimate for burden hours is based on a pilot test of the interview guide by a CDC public health professional. In the pilot test, the average time to complete the interview including time for introducing instructions, gathering needed information and completing the interview, was approximately 39 minutes. Based on these results, the estimated time range for actual respondents to complete the survey is 23-57 minutes. For the purposes of estimating burden hours, the average time (i.e., 39 minutes) is used.

Estimates for the average hourly wage for respondents are based on the Department of Labor (DOL) National Compensation Survey estimate for management occupations – medical and health services managers in state government (<http://www.bls.gov/ncs/ocs/sp/nctb1349.pdf>). Based on DOL data, an average hourly wage of \$57.11 is estimated for 10 Principal Investigators and an average hourly wage of \$26.00 is estimated for 10 Epidemiologists. Table A-12 shows estimated burden and cost information.

Table A-12: Estimated Annualized Burden Hours and Costs to Respondents

Type of Respondent	No. of Respondents	No. of Responses per Respondent	Average Burden per Response (in hours)	Total Burden Hours	Hourly Wage Rate	Total Respondent Costs
Principal Investigators	10	1	39/60	7	57.11	\$399.77
Epidemiologists	10	1	39/60	7	26.00	\$182.00
TOTALS	20	2		14		\$581.77

13. Estimates of Other Total Annual Cost Burden to Respondents or Record Keepers

There will be no direct costs to the respondents.

14. Annualized Cost to the Government

Table A-14: Estimated Annualized Cost to the Federal Government

Staff (FTE)	Average Hours per Collection	Average Hourly Rate	Average Cost
Associate Service Fellow (GS-12) Instrument development, pilot testing, OMB package preparation, data collection, data coding, data analysis, report preparation	350 hours	\$35.67	\$12,482
Estimated Total Cost of Information Collection			\$12,482

15. Explanation for Program Changes or Adjustments

This is a new data collection.

16. Plans for Tabulation and Publication and Project Time Schedule

Project Time Schedule

- ✓ Design interview guide..... (COMPLETE)
- ✓ Develop interview protocol, instructions, and analysis plan..... (COMPLETE)
- ✓ Pilot test interview protocol and guide..... (COMPLETE)
- ✓ Prepare OMB package..... (COMPLETE)
- Submit OMB package..... (TBD)
- OMB approval..... (TBD)
- Conduct interviews..... (4 weeks)
- Transcribe interview data..... (2 weeks)
- Code and analyze data..... (4 weeks)
- Prepare report..... (3 weeks)
- Disseminate results/reports..... (6 weeks)

17. Reason(s) Display of OMB Expiration Date is Inappropriate

We are requesting no exemption.

18. Exceptions to Certification for Paperwork Reduction Act Submissions

There are no exceptions to the certification. These activities comply with the requirements in 5 CFR 1320.9.

LIST OF ATTACHMENTS – Section A

Note: Attachments are included as separate files as instructed.

- A. ELC Logic Model**
- B. Interview Guide (Version: Principal Investigator)**
- C. Interview Guide (Version: Flexible Epidemiologist)**